

Amendments to the Claims

Claims 1-17 canceled.

18. (Original) A data reading device comprising
a housing;
a first window disposed on a first side of the housing;
a rotating facet wheel within the housing, the facet wheel
having a facet wheel axis and a plurality of primary mirror
facets;

a light source producing a reading beam directed onto the
facet wheel;

wherein the rotating facet wheel includes at least one
corner between a pair of adjacent facets, the corner comprised
of first and second corner facets disposed at an inward angle
relative to the primary mirror facets, the first and second
corner facets intersecting to form a line which is generally
coplanar with the facet wheel axis.

19. (Original) A data reading device according to Claim 18
wherein as the facet wheel is rotated the reading beam traverses
the corner facets to produce a more slowly scanned scan line
segment which is directed out of the device, the scan line segment
being formed by double reflecting the reading beam, firstly off
the first corner facet then off the second corner facet and out
the device as the reading beam traverses the first corner facet.

20. (Original) A data reading device according to Claim 19
wherein the scan line segment is further formed by double
reflecting the reading beam, secondly off the second corner facet

then off the first corner facet and out the device as the reading beam traverses the second corner facet.

21. (Original) A data reading device according to Claim 18 wherein the facet wheel comprises four primary mirror facets and only one corner.

22. (Original) A method of producing a scan line comprising the steps of:

arranging a facet wheel with a plurality of primary mirror facets;

arranging a corner between a pair of the mirror facets, the corner comprising first and second corner facets disposed at an inward angle relative to the primary mirror facets;

rotating the facet wheel;

directing a light beam onto the rotating facet wheel;

scanning the light beam by double reflecting the light beam impinging on the first and second corner facets, wherein the light beam impinging on the first corner facet is reflected off the first corner facet and onto the second corner facet and out into a scan volume, and wherein the light beam impinging on the second corner facet is reflected off the second corner facet and onto the first corner facet and out into the scan volume.

23. (Original) A data reading system comprising a reader unit having an upper housing section, a tapered lower housing section, and a window in the upper housing section, the reader unit being hand-holdable during a handheld mode of operation;

a base unit having (a) a lower base section supportable on a support surface and (b) an upwardly open cup portion, the tapered lower housing section being removably insertable into the cup portion for supporting the reader housing during a hands-free mode of operation, wherein the cup portion being adjustably connected to the lower base section for allowing orientation adjustment of the reader unit during hands-free mode of operation.

24. (Original) A data reading system according to Claim 23 further comprising a swivel section disposed between the cup portion and the lower base section for providing the orientation adjustment of the reader unit during hands-free mode of operation.

25. (Original) A data reading system according to Claim 23 wherein the reader unit is constructed and arranged with a low center of gravity for providing stability when disposed in the cup portion of the base unit.

26. (New) A data reader comprising
a housing;
a rotating scan mechanism within the housing;
a light source producing at least one beam directed onto
the scan mechanism;

wherein the data reader is operable to generate a first scan pattern of a plurality of scan lines by scanning the light beam with the scan mechanism, to direct the first scan pattern out the housing, and to receive a return signal from an item being scanned corresponding to scan lines of the first scan pattern;

wherein the data reader is operable to generate a second scan pattern of one or more scan lines by scanning the light beam with the scan mechanism and by selectively turning off the light source at certain periods of time, to direct the second scan pattern out the housing, and to receive a return signal corresponding to scan lines of the second scan pattern;

a manually actuated switch disposed on the housing, the switch being operable to disable decoding of the return signal corresponding to a scan pattern while the switch is being actuated.

27. (New) A data reader according to Claim 26 wherein the switch is operable to switch between a first mode generating only the first scan pattern and a second mode generating only the second scan pattern.

28. (New) A data reader according to Claim 26 wherein both the first scan pattern and the second scan pattern are generated to be operative at the same time.

29. (New) A data reader according to Claim 26 further comprising pattern mirrors disposed in the housing for reflecting the scan lines of the first scan pattern and to direct the first scan pattern out the housing forming an omnidirectional pattern.

30. (New) A data reader according to Claim 26 wherein the second scan pattern comprises a single line pattern.

31. (New) A data reader according to Claim 26 wherein the second scan pattern comprises about three generally parallel or slightly overlapping scan lines.

32. (New) A data reader according to Claim 26 wherein the data reader includes a first window and a second window, the first scan pattern being directed out the first window and the second scan pattern being directed out the second window.

33. (New) A data reader comprising
a housing;
a rotating scan mechanism within the housing;
a light source producing at least one beam directed onto
the scan mechanism;

wherein the data reader is operable to generate a first scan pattern of a plurality of scan lines by scanning the light beam with the scan mechanism, to direct the first scan pattern out the housing, and to receive a return signal from an item being scanned corresponding to the first scan pattern;

wherein the data reader is operable to generate a second scan pattern of one or more scan lines by scanning the light beam with the scan mechanism and by selectively turning off the light source at certain periods of time, to direct the second scan pattern out the housing, and to receive a return signal from an item being scanned corresponding to the second scan pattern;

a manually actuated switch disposed on the housing, wherein processing of the return signal from one of the scan patterns is disabled while the switch is being actuated.

34. (New) A method for reading optical codes with a data reader, comprising the steps of

providing the data reader with a housing having at least one opening;

generating a laser beam;

providing a scan mechanism in a path of the laser beam;

scanning the laser beam with the scan mechanism to generate a first scan pattern, directing the first scan pattern out the housing, and receiving a return signal from an item being scanned corresponding to the first scan pattern;

scanning the laser beam with the scan mechanism to generate a second scan pattern, directing the second scan pattern out the housing, and receiving a return signal from an item being scanned corresponding to the second scan pattern;

switching from a first mode whereby at least one scan pattern is generated, directed out the housing, return signal received and decoding enabled to a second mode whereby at least one scan pattern is generated, directed out the housing, return signal received and decoding disabled.

35. (New) A method according to Claim 34 further comprising switching the data reader between generating only the first scan pattern to generating only the second scan pattern.

36. (New) A method according to Claim 34 further comprising actuating a manual switch for switching to the second mode.

37. (New) A method for reading optical codes with a data reader, comprising the steps of

 providing the data reader with a housing having at least one opening;

 generating a laser beam;

 providing a scan mechanism in a path of the laser beam;

 scanning the laser beam with the scan mechanism to generate a first scan pattern, directing the first scan pattern out the housing, and receiving a return signal from an item being scanned corresponding to the first scan pattern;

 scanning the laser beam with the scan mechanism to generate a second scan pattern, directing the second scan pattern out the housing, and receiving a return signal from an item being scanned corresponding to the second scan pattern;

 switching from a first mode whereby at least one scan pattern is generated, directed out the housing, return signal received and processing enabled to a second mode whereby at least one scan pattern is generated, directed out the housing, return signal received and processing disabled.

38. (New) A method for reading optical codes with a data reader, comprising the steps of

 providing the data reader with a housing having at least one opening;

 generating a laser beam;

 providing a rotating scan mechanism in a path of the laser beam;

 operating in a first mode by scanning the laser beam with the scan mechanism to generate a first scan pattern out the

housing, the first scan pattern having a plurality of scan lines;

operating in a second mode by selectively turning off the laser beam during a portion or portions of rotation of the scan mechanism to generate a second scan pattern of one or more scan lines of a fewer number than that of the first scan pattern and disabling decoding of return signal from one or more scan lines being generated.

39. (New) A method according to Claim 38 further comprising switching the data reader between generating only the first scan pattern to generating only the second scan pattern.

40. (New) A method according to Claim 38 further comprising actuating a manual switch for switching to the second mode.

41. (New) A method for reading optical codes with a data reader, comprising the steps of

providing the data reader with a housing having at least one opening;

generating a laser beam;

providing a rotating scan mechanism in a path of the laser beam;

operating in a first mode by scanning the laser beam with the scan mechanism to generate a first scan pattern out the housing, the first scan pattern having a plurality of scan lines;

operating in a second mode by selectively turning off the laser beam during a portion or portions of rotation of the scan

mechanism to generate a second scan pattern of one or more scan lines of a fewer number than that of the first scan pattern and disabling processing of return signal from one or more scan lines being generated.

42. (New) A data reader comprising
a pedestal portion;
a generally spherical head portion position-adjustably mounted onto the pedestal portion and supported thereon for operation in a hands-free mode of operation, the head portion including non-spherical surfaces on lateral sides thereof for facilitating grasping of the head portion in a handheld mode of operation;

data reading optics disposed in the head portion;
electronics disposed in the pedestal portion.

43. (New) A data reader according to Claim 42 further comprising a window disposed in the head portion and wherein the data reading optics comprise a scan engine for producing a multi-line omnidirectional scan pattern out through the window.

44. (New) A data reader according to Claim 42 wherein the head portion is removable from the pedestal portion for the handheld mode of operation.